

CLAIMS

1. An analog to digital converter ("ADC"), comprising:  
5           a band gap reference (BGR) circuit whose  
output is internally coupled to an analog input of the  
ADC.
2. The ADC of Claim 1, further comprising:  
          a positive analog supply voltage (AVDD) and a  
10   positive analog reference voltage (REFP) operationally  
coupled to a same voltage supply; wherein a BGR value  
is used by a CPU as a calibration constant for  
determining an AVDD value.
3. The ADC of Claim 1, wherein the ADC can measure the  
15   AVDD without using a divider.
4. The ADC of Claim 1, wherein the measured BGR value  
is inversely proportional to the AVDD value.
5. A system using a CPU, comprising:  
          an analog to digital converter ("ADC"),  
20   wherein the ADC includes:  
          a band gap reference (BGR) circuit output  
internally coupled to an analog input to the ADC.
6. The system of Claim 5, further comprising:  
          a positive analog supply voltage (AVDD) and a  
25   positive analog reference voltage (REFP) operationally

coupled to same voltage supply; wherein a BGR value is used by the CPU as a calibration constant for determining an AVDD value.

7. The system of Claim 5, wherein the ADC can measure  
5 the AVDD without using a divider.

8. The system of Claim 5, wherein the measured BGR value is inversely proportional to the AVDD value.

9. An application specific integrated circuit ("ASIC"), comprising:

10 an analog to digital converter ("ADC"), comprising:

a band gap reference (BGR) circuit whose output is internally coupled to an analog input of the ADC.

15 10. The ASIC of Claim 9, further comprising:

a positive analog supply voltage (AVDD) and a positive analog reference voltage (REFP) operationally coupled to same voltage supply; wherein a BGR value is used by a CPU as a calibration constant for determining  
20 an AVDD value.

11. The ASIC of Claim 9, wherein the ADC can measure the AVDD without using a divider.

12. The system of Claim 9, wherein the measured BGR value is inversely proportional to the AVDD value.